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OCCUPATIONAL INJURIES AND DISEASES IN **ALBERTA**

Lost-Time Claims and Claim Rates

Upstream Oil & Gas Industries

2001 to 2005

Released July 2006

WORK SAFE ALBERTA

Alberta
Human Resources
and Employment

*Building
Alberta's
Workforce*

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HIGHLIGHTS

From 2001 to 2005...

- There were 6,688 lost-time claims from workers in the Upstream Oil and Gas industries. Of those, 36.4% involved Downhole and Other Oilfield Services, 16.0% Oilfield Trucking Services, and 15.4% Drilling of Oil and Gas Wells.
- Sprains, strains and tears were the most common nature of injury, accounting for 35.6% of the total lost-time claims.
- The trunk was the most common body part injured, accounting for over one-third of all claims.
- Nearly thirty per cent of incidents involved overexertion or being struck by objects.
- More than half of the injured workers were 25 to 44 years of age.
- Twenty-seven per cent of claims resulted in 51 days or more off work.

In 2005...

- The Workers' Compensation Board – Alberta (WCB) accepted 1,481 lost-time claims from Upstream Oil and Gas workers, representing 4.2% of all lost-time claims in the province.
- The lost-time claim rate for the Upstream Oil and Gas industries was 1.3 per 100 person-years, remaining unchanged from 2004. The 2005 provincial lost-time claim rate was 2.4 per 100 person-years.
- The duration rate for the Upstream Oil and Gas industries was 49 days lost per 100 person-years compared to the provincial rate of 57 per 100 person-years.
- The Tar Sands sub-sector had the lowest lost-time claim rate of all Upstream Oil and Gas sub-sectors, at 0.2 per 100 person-years. Oilfield Trucking Services had the highest lost-time claim rate, at 4.4 per 100 person-years.
- Employers with 20 to 39 person-years had the highest lost-time claim rate of 2.4 per 100 person-years.

- Over six per cent of all employers in the Upstream Oil and Gas industries had a valid Certificate of Recognition (COR).

- The WCB accepted 12 occupational fatalities for compensation in the Upstream Oil and Gas industries, representing 8.4% of all workplace fatalities accepted in Alberta.

SECTION

1

INTRODUCTION

Role of Alberta Human Resources and Employment

Alberta Human Resources and Employment (AHRE) provides a continuum of services and information to support the development of a skilled and productive labour force; fair, safe, healthy and productive workplaces; and helping improve the well-being of Albertans. AHRE develops and delivers programs and services that contribute to workplaces for employees and employers by:

- working with industry and safety associations to audit and certify health and safety programs
- helping employers, employees, unions and industry associations work together by offering facilitation services, workshops and partnership opportunities
- developing and maintaining policy and legislated employment standards in Alberta
- preparing and providing ongoing support of Alberta's workplace health and safety regulations
- explaining legislated standards under the *Occupational Health and Safety Act* and the *Employment Standards Code* and ensuring compliance through complaint resolution, investigation and targeted inspections.

Occupational Injuries and Diseases in Upstream Oil and Gas Industries 2001 to 2005

Each year, AHRE prepares a report on the occupational injuries and diseases in the Upstream Oil and Gas industries to provide a detailed review of workplace health and safety. The purpose of this report is to provide government, employers, workers, and health and safety professionals with information about key health and safety issues. This report includes:

- estimations of the risk of injury or disease at the provincial, industry sector and sub-sector level as well as general descriptions about the incidents and injured workers
- occupational fatalities accepted by the WCB for compensation and fatality rates for the major industry sectors
- number of employers that earned a Certificate of Recognition (COR).

Notes about this report:

- This report presents 2005 data beside 2004 data to help with comparisons. Additional historical data are presented where possible.

- Throughout the report, the lost-time claim rate is the number of claims per 100 person-years, and the duration rate is the number of days lost per 100 person-years.

- Lost-time claim rates based on a small number of person-years is too volatile to make a valid comparison. Therefore, the lost-time claim rate is not calculated when there are fewer than 40 person-years.

- Duration rates are highly unstable when based on a small number of lost-time claims. Duration rates are not calculated when there are fewer than 30 lost-time claims.

- In 2005, improvements have been made to the data collection. A stricter definition of a lost-time claim has been adopted and applied to the data covering the period 2001 to 2005. Previously, a small proportion of modified-work claims were also captured as lost-time.

- Improvements have also been made in the analysis by workers occupation. The 2001 National Occupation Classification (NOC) has been adopted for the presentation of figures by occupation. The NOC 2001 provides a standardized framework reflecting the Canadian labour market. For further information please see http://www23.hrdc-drhc.gc.ca/2001/e/generic/welcome.shtml

- Terms, definitions and formulas are described in Appendix A. Industry codes are listed in Appendix B.

SECTION

2

LOST-TIME CLAIM RATE AND DURATION RATE

The lost-time claim rate[1] represents the probability or risk of an injury or disease to a worker during a period of one year that requires time away from work. The 2005 lost-time claim rate for the Upstream Oil and Gas industries was 1.3 per 100 person-years.

In 2005, there were 1,481 lost-time claims in the Upstream Oil and Gas industries, representing 4.2% of the total lost-time claims in the province. The Upstream Oil and Gas industries' lost-time claim rate was 1.3 per 100 person-years, unchanged from 2004 (see Table 2.0). The 2005 provincial lost-time claim rate was 2.4 per 100 person-years. The lost-time claim rate of 1.3 per 100 person-years translates to six lost-time claims per million hours worked.

The duration rate attempts to show the severity of the effects of occupational injury and disease as reflected by the number of days off work per 100 person-years. In 2005, the Upstream Oil and Gas industries had a duration rate of 49, a 3.9% decrease from the 2004 rate of 51 and 14.0% lower than the provincial rate of 57.

Table 2.0
Upstream Oil and Gas Industries — Alberta: 2001-2005

Year	Number of Accounts	Cost of Claims	Person-Years	Days Lost	Duration Rate	Lost-Time Claims	Lost-Time Claim Rate
2001	9,281	$13,703,800	84,144	69,480	83	1,393	1.7
2002	9,853	$12,599,195	87,492	55,667	64	1,118	1.3
2003	10,789	$15,815,836	90,954	61,584	68	1,420	1.6
2004	11,986	$14,639,126	100,926	51,596	51	1,276	1.3
2005	**13,787**	**$16,003,554**	**114,928**	**56,207**	**49**	**1,481**	**1.3**

Data Source: 2005 WCB Data, Prepared by Data Development and Evaluation

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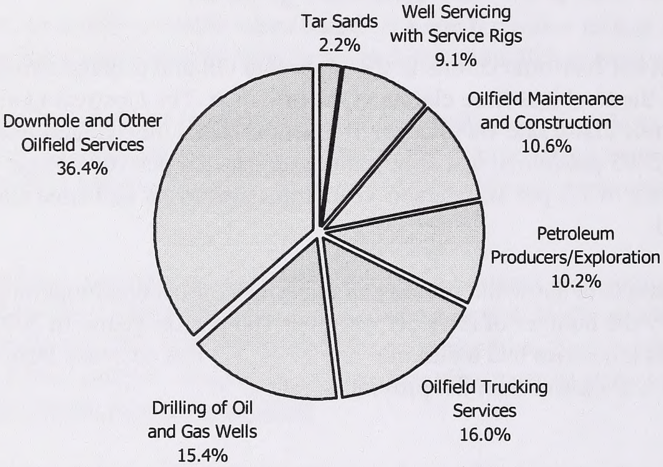
[1] The rate has been calculated from lost-time claims data as of March 31, 2006. This rate underestimates the risk of occupational injury and disease since some lost-time claims that occurred in 2005 were not administered by March 31, 2006.

Between 2001 and 2005, there were 6,688 lost-time claims in the Upstream Oil and Gas industries. The Downhole and Other Oilfield Services sub-sector accounted for more than one-third of total lost-time claims, followed by the Oilfield Trucking Services sub-sector, at 16.0%. The Tar Sands sub-sector experienced the fewest lost-time claims, at 2.2% (see Chart 2.0).

Chart 2.0
Lost-Time Claims by Upstream Oil and Gas Sub-Sector — Alberta: 2001-2005



Data Source: 2005 WCB Data, Prepared by Data Development and Evaluation

2.1 Lost-Time Claim Rate by Size of Employer

In the Upstream Oil and Gas industries, employers with 20 to 39 person-years had the highest lost-time claim rate at 2.4, followed by employers with 10 to 19 person-years and 40 to 99 person-years at 2.0. Employers with 100 or more person-years had the lowest claim rate at 0.9 (see Table 2.1). For the province, employers with 20 to 39 and 40 to 99 person-years had the highest lost-time claim rate while employers with less than 10 person-years had the lowest.

Table 2.1
Lost-Time Claim Rate by Size[2] of Employer — Alberta: 2005

Size of Employer	Number of Accounts	Lost-Time Claims	Person-Years	Lost-Time Claim Rate
Less than 10 person-years	12,724	224	13,468	1.7
10 to 19 person-years	371	107	5,268	2.0
20 to 39 person-years	246	169	6,898	2.4
40 to 99 person-years	183	229	11,403	2.0
100 or more person-years	148	729	77,892	0.9
Unspecified	115	23	0	N/A [1]

[1] These are employers with no payroll information or with person-years equal to zero.
Data Source: 2005 WCB Data, Prepared by Data Development and Evaluation

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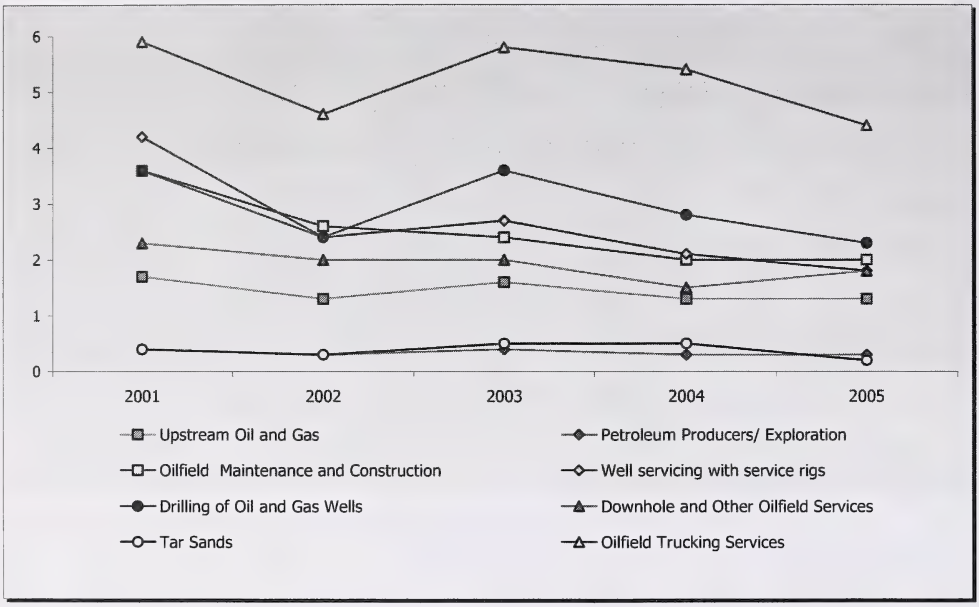
[2] Size is measured in terms of person-years.

2.2 Lost-Time Claims by Upstream Oil and Gas Sub-Sector

Between 2001 and 2005, the Oilfield Trucking Services sub-sector had the highest lost-time claim rate. The Petroleum Producers/Exploration sub-sector had the lowest rate from 2002-2004. The lowest rate in 2005 was the Tar Sands sub-sector. (see Chart 2.2).

Chart 2.2

Lost-Time Claim Rate by Upstream Oil and Gas Sub-Sector — Alberta: 2001-2005



Sub-Sector	2001	2002	2003	2004	2005
Upstream Oil and Gas	1.7	1.3	1.6	1.3	**1.3**
Petroleum Producers/ Exploration	0.4	0.3	0.4	0.3	**0.3**
Oilfield Maintenance and Construction	3.6	2.6	2.4	2.0	**2.0**
Well servicing with service rigs	4.2	2.4	2.7	2.1	**1.8**
Drilling of Oil and Gas Wells	3.6	2.4	3.6	2.8	**2.3**
Downhole and Other Oilfield Services	2.3	2.0	2.0	1.5	**1.8**
Tar Sands	0.4	0.3	0.5	0.5	**0.2**
Oilfield Trucking Services	5.9	4.6	5.8	5.4	**4.4**

Data Source: 2005 WCB Data, Prepared by Data Development and Evaluation

2.2A Petroleum Producers/Exploration

The lost-time claim rate in the Petroleum Producers/Exploration sub-sector was 0.3 per 100 person-years in 2005, the second lowest of all sub-sectors in the Upstream Oil and Gas industries. The duration rate increased from eight to nine days lost per 100 person-years in 2005, and remains the lowest of all sub-sectors (see Table 2.2A).

Table 2.2A
Petroleum Producers/Exploration — Alberta: 2001-2005

Year	Number of Accounts	Cost of Claims	Person-Years	Days Lost	Duration Rate	Lost-Time Claims	Lost-Time Claim Rate
2001	2,973	$1,149,725	38,517	5,160	13	141	0.4
2002	3,151	$1,056,790	38,261	4,885	13	124	0.3
2003	3,565	$2,236,899	38,871	5,135	13	166	0.4
2004	4,003	$1,251,137	42,246	3,479	8	125	0.3
2005	**4,690**	**$954,189**	**41,014**	**3,795**	**9**	**125**	**0.3**

Data Source: 2005 WCB Data, Prepared by Data Development and Evaluation

2.2B Oilfield Maintenance and Construction

The lost-time claim rate in the Oilfield Maintenance and Construction sub-sector was 2.0 per 100 person-years, unchanged from 2004. The duration rate increased from 59 in 2004 to 82 days lost per 100 person-years in 2005 (see Table 2.2B).

Table 2.2B
Oilfield Maintenance and Construction — Alberta: 2001-2005

Year	Number of Accounts	Cost of Claims	Person-Years	Days Lost	Duration Rate	Lost-Time Claims	Lost-Time Claim Rate
2001	949	$1,101,798	4,663	6,800	146	170	3.6
2002	958	$843,766	5,266	5,268	100	139	2.6
2003	987	$874,857	5,567	4,964	89	136	2.4
2004	1,052	$683,127	5,856	3,449	59	117	2.0
2005	**1,106**	**$1,037,598**	**7,315**	**5,974**	**82**	**149**	**2.0**

Data Source: 2005 WCB Data, Prepared by Data Development and Evaluation

2.2C Well Servicing with Service Rigs

In 2005, the Well Servicing with Service Rigs sub-sector experienced decreases in both its lost-time claim rate and duration rate. The lost-time claim rate fell by 12.4% from 2.1 to 1.8. The duration rate decreased by 35.5% from 124 to 80 days lost per 100 person-years (see Table 2.2C).

Table 2.2C
Well Servicing with Service Rigs — Alberta: 2001-2005

Year	Number of Accounts	Cost of Claims	Person-Years	Days Lost	Duration Rate	Lost-Time Claims	Lost-Time Claim Rate
2001	116	$1,743,048	3,810	9,254	243	161	4.2
2002	116	$1,497,391	4,107	7,216	176	100	2.4
2003	126	$2,264,500	4,703	8,938	190	129	2.7
2004	138	$1,820,588	5,231	6,484	124	109	2.1
2005	**180**	**$1,509,563**	**6,078**	**4,891**	**80**	**111**	**1.8**

Data Source: 2005 WCB Data, Prepared by Data Development and Evaluation

2.2D Drilling of Oil and Gas Wells

Drilling of Oil and Gas Wells experienced an 18.8% decrease in the lost-time claim rate from 2.8 in 2004 to 2.3 in 2005. The duration rate in 2005 was 103 per 100 person-years, a 35.6% decrease from 2004 (see Table 2.2D).

Table 2.2D
Drilling of Oil and Gas Wells — Alberta: 2001-2005

Year	Number of Accounts	Cost of Claims	Person-Years	Days Lost	Duration Rate	Lost-Time Claims	Lost-Time Claim Rate
2001	91	$3,512,027	6,012	12,324	205	218	3.6
2002	95	$2,550,147	5,501	9,562	174	131	2.4
2003	114	$3,970,513	6,252	12,913	207	227	3.6
2004	124	$4,181,840	7,289	11,689	160	207	2.8
2005	**149**	**$3,719,845**	**10,801**	**11,145**	**103**	**249**	**2.3**

Data Source: 2005 WCB Data, Prepared by Data Development and Evaluation

2.2E Downhole and Other Oilfield Services

In 2005, the lost-time claim rate for Downhole and Other Oilfield Services was 1.8 per 100 person-years, up from 1.5 in 2004. The duration rate was 60 days lost per 100 person-years, an increase of 15.4% from 2004 (see Table 2.2E).

Table 2.2E
Downhole and Other Oilfield Services — Alberta: 2001-2005

Year	Number of Accounts	Cost of Claims	Person-Years	Days Lost	Duration Rate	Lost-Time Claims	Lost-Time Claim Rate
2001	4,325	$4,412,250	21,123	24,642	117	490	2.3
2002	4,678	$4,915,846	21,347	19,938	93	435	2.0
2003	5,109	$4,098,185	24,853	18,387	74	502	2.0
2004	5,709	$4,102,354	29,206	15,064	52	439	1.5
2005	**6,527**	**$5,840,560**	**32,446**	**19,506**	**60**	**571**	**1.8**

Data Source: 2005 WCB Data, Prepared by Data Development and Evaluation

2.2F Tar Sands

In 2005 the lost-time claim rate for the Tar Sands sub-sector fell from 0.5 to 0.2 per 100 person-years, the lowest in the past five years. The lost-time claim rate was the lowest of all sub-sectors in the Upstream Oil and Gas industries (see Table 2.2F).

Table 2.2F
Tar Sands — Alberta: 2001-2005

Year	Number of Accounts	Cost of Claims	Person-Years	Days Lost	Duration Rate	Lost-Time Claims	Lost-Time Claim Rate
2001	19	$120,021	6,842	338	N/A	24	0.4
2002	26	$230,493	9,567	588	N/A	29	0.3
2003	31	$452,583	6,831	936	14	36	0.5
2004	49	$312,728	6,559	668	10	35	0.5
2005	**81**	**$291,364**	**11,504**	**513**	**N/A [1]**	**25**	**0.2**

[1] The Duration rate is not calculated when there are fewer than 30 lost-time claims.

Data Source: 2005 WCB Data, Prepared by Data Development and Evaluation

2.2G Oilfield Trucking Services

The lost-time claim rate for Oilfield Trucking Services was 4.4 per 100 person-years in 2005, which was a decrease of 19.1% from 5.4 in 2004. The duration rate fell by 24.1% from 237 in 2004 to 180 days lost per 100 person-years in 2005 (see Table 2.2G).

Table 2.2G
Oilfield Trucking Services — Alberta: 2001-2005

Year	Number of Accounts	Cost of Claims	Person-Years	Days Lost	Duration Rate	Lost-Time Claims	Lost-Time Claim Rate
2001	808	$1,664,930	3,178	10,962	345	189	5.9
2002	829	$1,504,762	3,442	8,210	239	160	4.6
2003	857	$1,918,300	3,877	10,311	266	224	5.8
2004	911	$2,287,353	4,539	10,763	237	244	5.4
2005	**1,054**	**$2,650,436**	**5,769**	**10,383**	**180**	**251**	**4.4**

Data Source: 2005 WCB Data, Prepared by Data Development and Evaluation

INJURY AND DISEASE ANALYSIS

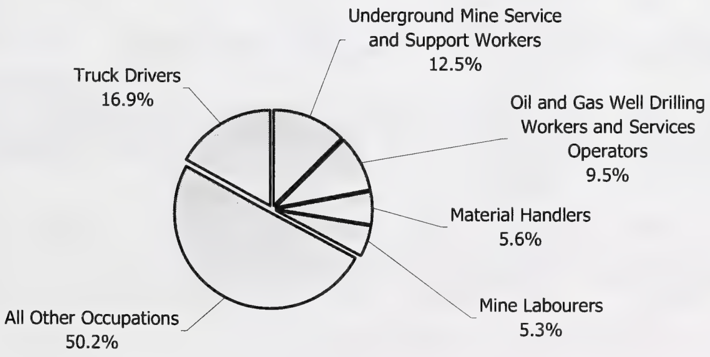
Being struck by objects and overexertion were the most common causes of lost-time claims in the Upstream Oil and Gas industries. Sprains, strains and tears continued to be the leading nature of injury with the trunk being the most commonly injured body part.

This section describes the characteristics of the injured workers and the nature of their injuries or diseases. Tables are provided to enable comparisons of 2005 injuries and diseases in Upstream Oil and Gas industries with provincial averages and trends. A detailed explanation of the formulas for calculating the indicators of the comparison tables is available in Appendix A.

3.1 Injured Worker Characteristics

In 2005, five occupations accounted for close to half of total claims in the Upstream Oil and Gas industries. Truck drivers had the most claims at 16.9%, followed by Underground Mine Service and Support Workers at 12.5% (see Chart 3.1A).

Chart 3.1A
Lost-Time Claims by Occupation — Alberta: 2005



Data Source: 2005 WCB Data, Prepared by Data Development and Evaluation

Between 2001 and 2005, more than half of claims were from workers aged 25 to 44 years. Young workers aged 15 to 24 accounted for 25.7% of total claims, while workers aged 45 years and older had 17.3% of claims (see Table 3.1A).

Table 3.1A
Lost-Time Claims by Age — Alberta: 2001-2005

Age	2001	2002	2003	2004	2005	Total	
						Lost-Time Claims	%
15-19 Years	87	53	87	60	**84**	371	5.5%
20-24 Years	304	199	292	255	**298**	1348	20.2%
25-34 Years	463	384	482	429	**471**	2229	33.3%
35-44 Years	342	298	334	278	**324**	1576	23.6%
45-54 Years	141	131	167	178	**207**	824	12.3%
55-64 Years	45	38	51	60	**79**	273	4.1%
65+ Years	7	10	6	16	**18**	57	0.9%
Unspecified	4	5	1	0	**0**	10	0.1%
Total	**1,393**	**1,118**	**1,420**	**1,276**	**1,481**	**6,688**	**100%**

Data Source: 2005 WCB Data, Prepared by Data Development and Evaluation

In the Upstream Oil and Gas industries, the majority of lost-time claims were from men. Between 2001 and 2005, 94.7% of claims involved men. Lost-time claims from women accounted for 3.5% (see Table 3.1B).

Table 3.1B
Lost-Time Claims by Gender — Alberta: 2001-2005

Gender	2001	2002	2003	2004	2005	Total	
						Lost-Time Claims	%
Female	45	50	56	32	**48**	231	3.5%
Male	1,324	1,038	1,332	1,217	**1,420**	6,331	94.7%
Unspecified	24	30	32	27	**13**	126	1.9%
Total	**1,393**	**1,118**	**1,420**	**1,276**	**1,481**	**6,688**	**100.0%**

Data Source: 2005 WCB Data, Prepared by Data Development and Evaluation

3.2 Nature of Injury or Disease

The nature of injury is used to identify the physical characteristics of the injury or disease. Between 2001 and 2005, 89.2% of all the lost-time claims were caused by traumatic injuries and disorders. The four most common traumatic injuries and disorders were: sprains, strains and tears, 35.6%; fractures and dislocations, 19.8%; surface wounds and bruises, 10.6%; and open wounds, 7.1% (see Table 3.2A).

Table 3.2A
Nature of Injury or Disease — Alberta: 2001-2005

						Total	
Nature of Injury or Disease	**2001**	**2002**	**2003**	**2004**	**2005**	**Lost-Time Claims**	**%**
Traumatic Injuries and Disorders	**1,267**	**984**	**1,259**	**1,146**	**1,310**	**5,966**	**89.2%**
Sprains, Strains and Tears	473	427	513	456	513	2,382	35.6%
Fractures and Dislocations	293	215	259	260	295	1,322	19.8%
Surface Wounds and Bruises	160	102	143	136	166	707	10.6%
Open Wounds	116	69	101	90	96	472	7.1%
Burns	63	36	64	54	61	278	4.2%
Other Traumatic Injuries and Diseases	162	135	179	150	179	805	12.0%
Systemic Diseases and Disorders	**54**	**46**	**93**	**79**	**105**	**377**	**5.6%**
Other Diseases, Conditions and Disorders	**5**	**5**	**1**	**9**	**8**	**28**	**0.4%**
Symptoms, Signs and Ill-Defined Conditions	**4**	**3**	**1**	**3**	**3**	**14**	**0.2%**
Infectious and Parasitic Diseases	**0**	**2**	**0**	**0**	**0**	**2**	**<0.1%**
Multiple Diseases, Conditions and Disorders	**1**	**0**	**0**	**0**	**0**	**1**	**<0.1%**
Neoplasms, Tumors and Cancer	**0**	**0**	**0**	**1**	**1**	**2**	**<0.1%**
Nature of Injury - Unknown	**62**	**78**	**66**	**38**	**54**	**298**	**4.5%**
Total	**1,393**	**1,118**	**1,420**	**1,276**	**1,481**	**6,688**	**100.0%**

Data Source: 2005 WCB Data, Prepared by Data Development and Evaluation

In 2005, sprains, strains and tears accounted for 34.6% of all claims in the Upstream Oil and Gas industries. This was 0.4 times lower than the average percentage of injuries for this nature of injury category for the whole province. The percentage of injuries in all nature of injury categories for 2005 was lower than or equal to the provincial average, except for other diseases, conditions and disorders, fractures and dislocations and neoplasms, tumors and cancer, which were 1.1 times higher than the provincial average (see Table 3.2B).

Table 3.2B
Nature of Injury or Disease — Comparison 2005[3]

Lost-Time Claims Comparison 2005	% of Upstream Oil and Gas Industries' Claims	% of Total Provincial Claims	Number of Times Higher/Lower than the Provincial Average
Traumatic Injuries and Disorders	**88.4%**	**90.9%**	**0.5**
Sprains, Strains and Tears	34.6%	47.6%	0.4
Fractures and Dislocations	19.9%	11.5%	1.1
Surface Wounds and Bruises	11.2%	8.9%	0.5
Open Wounds	6.5%	9.2%	0.3
Burns	4.1%	2.7%	0.8
Other Traumatic Injuries and Diseases	12.1%	10.9%	0.6
Systemic Diseases and Disorders	**7.1%**	**4.9%**	**0.7**
Other Diseases, Conditions and Disorders	**0.5%**	**0.2%**	**1.1**
Symptoms, Signs and Ill-Defined Conditions	**0.2%**	**0.3%**	**0.3**
Neoplasms, Tumors and Cancer	**0.1%**	**<0.1%**	**1.1**
Nature of Injury - Unknown	**3.6%**	**3.5%**	**0.5**

Data Source: 2005 WCB Data, Prepared by Data Development and Evaluation

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[3] Number of Times Higher/Lower Than the Provincial Average: 1 indicates that the injury percentage of the industries is equal to the provincial average; greater than 1 indicates that the injury percentage of the industries is higher than the provincial average; less than 1 indicates that the injury percentage of the industries is lower than the provincial average. See Appendix A for calculation details.

3.3 Part of Body Injured

Between 2001 and 2005, the trunk was the most commonly injured body part, accounting for more than one-third of the total lost-time claims in the Upstream Oil and Gas industries, followed by lower extremities, at 24.7% and upper extremities at 21.6%.

The most common trunk injury was to the back, including spine and spinal cord, representing 20.2% of the total lost-time claims (see Table 3.3A).

Table 3.3A
Part of Body Injured — Alberta: 2001-2005

Part of Body Injured	2001	2002	2003	2004	2005	Total Lost-Time Claims	Total %
Trunk	**442**	**386**	**473**	**441**	**500**	**2,242**	**33.5%**
Back, Including Spine, Spinal Cord	266	232	285	262	305	1,350	20.2%
Other Trunk	176	154	188	179	195	892	13.3%
Lower Extremities	**362**	**276**	**340**	**297**	**379**	**1,654**	**24.7%**
Leg(s)	168	136	165	147	199	815	12.2%
Ankle(s) and Foot (Feet) Except Toes	165	122	147	133	164	731	10.9%
Other Lower Extremities	29	18	28	17	16	108	1.6%
Upper Extremities	**323**	**242**	**311**	**269**	**299**	**1,444**	**21.6%**
Finger(s), Fingernail(s)	154	107	134	106	123	624	9.3%
Wrist(s) and Hand(s) Except Finger(s)	95	68	98	98	102	461	6.9%
Other Upper Extremities	74	67	79	65	74	359	5.4%
Head	**109**	**69**	**132**	**123**	**157**	**590**	**8.8%**
Eye(s)	40	15	54	31	48	188	2.8%
Other Head Parts	69	54	78	92	109	402	6.0%
Multiple Body Parts	**118**	**97**	**124**	**105**	**110**	**554**	**8.3%**
Neck, Including Throat	**24**	**19**	**27**	**22**	**17**	**109**	**1.6%**
Body Systems	**11**	**8**	**6**	**12**	**13**	**50**	**0.7%**
Part of Body - Unknown	**4**	**16**	**7**	**5**	**6**	**38**	**0.6%**
Other Body Parts	**0**	**5**	**0**	**2**	**0**	**7**	**0.1%**
Total	**1,393**	**1,118**	**1,420**	**1,276**	**1,481**	**6,688**	**100.0%**

Data Source: 2005 WCB Data, Prepared by Data Development and Evaluation

In 2005, the back, including spine and spinal cord accounted for 20.6% of all claims in the Upstream Oil and Gas industries. This was 0.4 times lower than the average percentage of injuries for this part of body category for the whole province. The percentage of injuries in all part of body categories for 2005 was lower than the provincial average except for where the part of body is unknown (see Table 3.3B).

Table 3.3B
Part of Body Injured — Comparison 2005[4]

Part of Body Injured	% of Upstream Oil and Gas Industries' Claims	% of Total Provincial Claims	Number of Times Higher/Lower Than the Provincial Average
Trunk	**33.8%**	**38.6%**	**0.5**
Back, Including Spine, Spinal Cord	20.6%	26.0%	0.4
Other Trunk	13.2%	12.6%	0.5
Lower Extremities	**25.6%**	**19.8%**	**0.7**
Leg(s)	13.4%	9.8%	0.7
Ankle(s) and Foot (Feet) Except Toes	11.1%	8.8%	0.6
Other Lower Extremities	1.1%	1.2%	0.4
Upper Extremities	**20.2%**	**23.8%**	**0.5**
Finger(s), Fingernail(s)	8.3%	9.2%	0.5
Wrist(s) and Hand(s) Except Finger(s)	6.9%	8.1%	0.4
Other Upper Extremities	5.0%	6.5%	0.4
Head	**10.6%**	**7.9%**	**0.7**
Eye(s)	3.2%	3.2%	0.5
Other Head Parts	7.4%	4.7%	0.8
Multiple Body Parts	**7.4%**	**7.0%**	**0.5**
Neck, Including Throat	**1.1%**	**2.3%**	**0.2**
Body Systems	**0.9%**	**0.5%**	**1.0**
Part of Body - Unknown	**0.4%**	**0.2%**	**1.1**

Data Source: 2005 WCB Data, Prepared by Data Development and Evaluation

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[4] Number of Times Higher/Lower Than the Provincial Average: 1 indicates that the injury percentage of the industries is equal to the provincial average; greater than 1 indicates that the injury percentage of the industries is higher than the provincial average; less than 1 indicates that the injury percentage of the industries is lower than the provincial average. See Appendix A for calculation details.

3.4 Source of Injury or Disease

The source of injury or disease describes the object or substance that the worker came in contact with resulting in an injury or disease. The primary sources of injury for the lost-time claims in the Upstream Oil and Gas industries between 2001 and 2005 were parts and materials, 17.5%; structures and surfaces, 16.3%; and persons, plants, animals and minerals 14.9% (see Table 3.4A).

Table 3.4A

Source of Injury or Disease — Alberta: 2001-2005

						Total	
Source of Injury or Disease	**2001**	**2002**	**2003**	**2004**	**2005**	**Lost-Time Claims**	**%**
Parts and Materials	**254**	**154**	**242**	**248**	**274**	**1,172**	**17.5%**
Structures and Surfaces	**203**	**168**	**234**	**195**	**287**	**1,087**	**16.3%**
Persons, Plants, Animals and Minerals	**167**	**167**	**228**	**201**	**234**	**997**	**14.9%**
Person - Injured or Ill Worker	149	152	218	188	216	923	13.8%
Person - Other Than Injured or Ill Worker [1]	2	2	1	2	2	9	0.1%
Minerals - Metallic or Nonmetallic (except fuel)	6	8	5	7	13	39	0.6%
Other Persons, Plants, Animals & Minerals	10	5	4	4	3	26	0.4%
Vehicles	**163**	**125**	**161**	**144**	**163**	**756**	**11.3%**
Tools, Instruments and Equipment	**89**	**70**	**86**	**71**	**83**	**399**	**6.0%**
Hand tools - Non-powered	53	42	46	40	52	233	3.5%
Hand tools - Powered	7	5	5	10	3	30	0.4%
Other Tools and Equipments	29	23	35	21	28	136	2.0%
Machinery	**69**	**54**	**73**	**73**	**65**	**334**	**5.0%**
Containers [2]	**71**	**46**	**58**	**50**	**50**	**275**	**4.1%**
Chemicals and Chemical Products	**20**	**11**	**38**	**21**	**34**	**124**	**1.9%**
Furniture and Fixtures	**13**	**7**	**8**	**6**	**16**	**50**	**0.7%**
Other Sources	**77**	**57**	**114**	**119**	**129**	**496**	**7.4%**
Source of Injury - Unknown	**267**	**259**	**178**	**148**	**146**	**998**	**14.9%**
Total	**1,393**	**1,118**	**1,420**	**1,276**	**1,481**	**6,688**	**100.0%**

[1] Persons – other than injured or ill worker: classifies injuries or illnesses inflicted by family members as well as non-family relations, including co-workers, former co-workers, and patients.

[2] Containers: classifies receptacles that are commonly used to hold, store or carry materials (examples: dishes, cups and glasses, luggage, etc.).

Data Source: 2005 WCB Data, Prepared by Data Development and Evaluation

In 2005, parts and materials accounted for 18.5% of all claims in the Upstream Oil and Gas industries. The average percentage of injuries for this source of injury category was equal to the whole province. The percentage of injuries in most source of injury categories was equal to or lower than the provincial average, except for minerals – metallic and non-metallic (except fuel) (see Table 3.4B).

Table 3.4B
Source of Injury or Disease — Comparison 2005[5]

Source of Injury or Disease	% of Upstream Oil and Gas Industries' Claims	% of Total Provincial Claims	Number of Times Higher/Lower Than the Provincial Average
Parts and Materials	**18.5%**	**10.5%**	**1.0**
Persons, Plants, animals and Minerals	**15.8%**	**24.5%**	**0.3**
Person - Injured or Ill Worker	14.6%	17.4%	0.4
Person - Other Than Injured or Ill Worker	0.1%	5.0%	<0.1
Minerals - Metallic or Nonmetallic (except fuel)	0.9%	0.4%	1.1
Other Persons, Plants, Animals & Minerals	0.2%	1.7%	0.3
Structures and Surfaces	**19.4%**	**16.7%**	**0.6**
Vehicles	**11.0%**	**7.4%**	**0.7**
Tools, Instruments and Equipment	**5.6%**	**6.7%**	**0.5**
Hand tools - Nonpowered	3.5%	3.4%	0.5
Hand tools - Powered	0.2%	1.1%	0.1
Other Tools and Equipments	1.9%	2.2%	0.4
Machinery	**4.4%**	**5.6%**	**0.4**
Containers	**3.4%**	**10.1%**	**0.2**
Chemicals and Chemical Products	**2.3%**	**1.2%**	**0.9**
Furniture and Fixtures	**1.1%**	**3.1%**	**0.2**
Other Sources	**8.7%**	**5.2%**	**0.8**
Source of Injury - Unknown	**9.9%**	**8.8%**	**0.6**

Data Source: 2005 WCB Data, Prepared by Data Development and Evaluation

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[5] Number of Times Higher/Lower Than the Provincial Average: 1 indicates that the injury percentage of the industries is equal to the provincial average; greater than 1 indicates that the injury percentage of the industries is higher than the provincial average; less than 1 indicates that the injury percentage of the industries is lower than the provincial average. See Appendix A for calculation details.

3.5 Type of Event or Exposure

The type of event or exposure describes the incident or event that occurred at the time of the exposure that directly resulted in the injury or disease. The two most common types of event or exposure comprised more than half of the total lost-time claims in the Upstream Oil and Gas industries in the last five years. They are: contact with objects and equipment, 28.8% and bodily reaction and exertion, 27.8% (see Table 3.5A).

Table 3.5A
Type of Event or Exposure — Alberta: 2001-2005

Type of Event or Exposure	2001	2002	2003	2004	2005	Total	
						Lost-Time Claim	%
Contact with Objects and Equipment	**433**	**292**	**414**	**368**	**421**	**1,928**	**28.8%**
Struck by Object	243	160	233	197	227	1,060	15.9%
Caught in Object	137	91	121	108	125	582	8.7%
Struck against Object	42	34	39	40	47	202	3.0%
Rubbed or Abraded	10	4	12	12	12	50	0.7%
Other Contact with Object/Equipment	1	3	9	11	10	34	0.5%
Bodily Reaction and Exertion	**345**	**311**	**409**	**376**	**420**	**1,861**	**27.8%**
Overexertion	194	155	187	183	197	916	13.7%
Bodily Reaction	129	125	171	153	166	744	11.1%
Repetitive Motion	14	20	38	25	39	136	2.0%
Other Bodily Reaction/Exertion	8	11	13	15	18	65	1.0%
Falls	**275**	**200**	**283**	**232**	**314**	**1,304**	**19.5%**
Fall on Same Level	145	91	152	127	183	698	10.4%
Fall to Lower Level	101	91	103	80	92	467	7.0%
Other Falls	29	18	28	25	39	139	2.1%
Transportation Accidents	**139**	**102**	**134**	**112**	**136**	**623**	**9.3%**
Exposure to Harmful Substances	**66**	**44**	**84**	**90**	**117**	**401**	**6.0%**
Fires and Explosions	**19**	**5**	**16**	**13**	**9**	**62**	**0.9%**
Assaults and Violent Acts	**2**	**2**	**0**	**2**	**2**	**8**	**0.1%**
Assaults and Violent Acts by Person(s)	1	1	0	2	2	6	0.1%
Other Assaults and Violent Acts	1	1	0	0	0	2	<0.1%
Type of Event - Unknown	**114**	**162**	**80**	**83**	**62**	**501**	**7.4%**
Total	**1,393**	**1,118**	**1,420**	**1,276**	**1,481**	**6,688**	**100.0%**

Data Source: 2005 WCB Data, Prepared by Data Development and Evaluation

In 2005, workers being struck by objects and overexertion each accounted for 15.3% and 13.3% respectively of all claims in the Upstream Oil and Gas industries. These were 0.6 times and 0.3 times lower than the average percentage of injuries for these type of event categories for the whole province. The percentage of injuries in all type of event categories was lower than the provincial average, except for fires and explosions (see Table 3.5B).

Table 3.5B
Type of Event or Exposure — Comparison 2005[6]

Type of Event or Exposure	% of Upstream Oil and Gas Industries' Claims	% of Total Provincial Claims	Number of Times Higher/Lower Than the Provincial Average
Bodily Reaction or Exertion	**28.3%**	**41.4%**	**0.4**
Overexertion	13.3%	23.0%	0.3
Bodily Reaction	11.2%	11.8%	0.5
Repetitive Motion	2.6%	4.7%	0.3
Other Bodily Reaction/Exertion	1.2%	1.9%	0.3
Contact with Objects or Equipment	**28.4%**	**25.5%**	**0.6**
Struck by Object	15.3%	13.2%	0.6
Struck against Object	3.2%	5.5%	0.3
Caught in Object	8.4%	4.4%	0.9
Rubbed or Abraded	0.8%	1.5%	0.3
Other Contact with Object/Equipment	0.7%	0.9%	0.4
Falls	**21.2%**	**16.9%**	**0.7**
Fall on Same Level	12.4%	10.4%	0.6
Fall to Lower Level	6.2%	5.0%	0.6
Other Falls	2.6%	1.5%	0.9
Transportation Accidents	**9.2%**	**4.9%**	**0.9**
Exposure to Harmful Substances	**7.9%**	**4.6%**	**0.9**
Assaults and Violent Acts by Person(s)	**0.1%**	**1.6%**	**0.1**
Assaults and Violent Acts by Person(s)	**<0.1%**	**1.3%**	**<0.1**
Other Assaults and Violent Acts	**<0.1%**	**0.3%**	**<0.1**
Fires and Explosions	**0.6%**	**0.2%**	**1.9**
Type of Event - Unknown	**4.2%**	**<0.1%**	**0.4**

Data Source: 2005 WCB Data, Prepared by Data Development and Evaluation

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[6] Number of Times Higher/Lower Than the Provincial Average: 1 indicates that the injury percentage of the industries is equal to the provincial average; greater than 1 indicates that the injury percentage of the industries is higher than the provincial average; less than 1 indicates that the injury percentage of the industries is lower than the provincial average. See Appendix A for calculation details.

3.6 Duration of Disability

Duration of disability[7] is intended to reflect the severity of the effects of occupational injury and disease as reflected by the number of days off work. However, the efforts of employers to introduce modified work programs to integrate injured workers more quickly back into the workforce can have a positive impact on workdays lost.

Over one-third of claims resulted in a duration of disability of 10 days or less. Claims with one to five days duration represented 23.7%, and six to 10 days, 12.7%. More than a quarter of the total lost-time claims between 2001 and 2005 resulted in 51 days or more lost from work (see Table 3.6A).

Table 3.6A
Duration of Disability — Alberta: 2001-2005

						Total	
Duration of Disability	**2001**	**2002**	**2003**	**2004**	**2005**	**Lost-Time Claims**	**%**
1-5 Days	299	248	356	294	**386**	1,583	23.7%
6-10 Days	192	148	181	148	**179**	848	12.7%
11-15 Days	118	82	112	94	**122**	528	7.9%
16-20 Days	79	65	64	81	**77**	366	5.5%
21-30 Days	97	79	105	115	**118**	514	7.7%
31-40 Days	83	66	74	71	**83**	377	5.6%
41-50 Days	73	53	65	75	**87**	353	5.3%
51 Days or More	401	347	394	339	**352**	1,833	27.4%
Unspecified	51	30	69	59	**77**	286	4.2%
Total	**1,393**	**1,118**	**1,420**	**1,276**	**1,481**	**6,688**	**100.0%**

Data Source: 2005 WCB Data, Prepared by Data Development and Evaluation

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[7] The duration of disability refers to the length of time, in days, for which the worker receives wage compensation from the WCB.

In 2005, claims resulting in 51 days or more duration of disability accounted for 23.8% of all claims in the Upstream Oil and Gas industries. This was 0.9 times lower than the average percentage of injuries for claims of this duration for the whole province. The percentage of injures in all duration categories was lower than the provincial average (see Table 3.6B).

Table 3.6B
Duration of Disability — Comparison 2005[8]

Duration of Disability	% of Upstream Oil and Gas Industries' Claims	% of Total Provincial Claims	Number of Times High/Lower Than the Provincial Average
1-5 Days	26.1%	40.4%	0.3
6-10 Days	12.1%	13.8%	0.5
11-15 Days	8.2%	7.9%	0.6
16-20 Days	5.2%	5.3%	0.5
21-30 Days	8.0%	6.9%	0.6
31-40 Days	5.6%	5.0%	0.6
41-50 Days	5.9%	3.6%	0.9
51 Days or More	23.8%	13.4%	0.9
Unspecified	5.2%	3.6%	0.8

Data Source: 2005 WCB Data, Prepared by Data Development and Evaluation

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[8] Number of Times Higher/Lower Than the Provincial Average: 1 indicates that the injury percentage of the industries is equal to the provincial average; greater than 1 indicates that the injury percentage of the industries is higher than the provincial average; less than 1 indicates that the injury percentage of the industries is lower than the provincial average. See Appendix A for calculation details.

OCCUPATIONAL FATALITIES

In 2005 the WCB accepted 12 fatalities in the Upstream Oil and Gas industries, accounting for 8.4% of all 143 fatalities in the province.

A WCB accepted occupational fatality is defined as the death of a worker, resulting from a work-related incident or exposure, which has been accepted by the WCB for compensation. The WCB classifies occupational fatalities into three general types:

Motor Vehicle Incidents

Motor vehicle incidents typically involve non-industrial vehicles operating on public roads in which the fatally injured worker was either the driver or a passenger. This type of occupational fatality also includes cases involving aircraft, train, helicopter and water vehicle crashes. In 2005, five of the Upstream Oil and Gas fatalities accepted by WCB were motor vehicle incidents (see Table 4.0).

Workplace Incidents

Workplace incidents consist of cases in which the worker died at a worksite or as a result of injuries sustained at a worksite. This is the type of fatality that AHRE typically investigates. In 2005, four of the Upstream Oil and Gas fatalities accepted by WCB were workplace incidents (see Table 4.0).

Occupational Disease

Occupational disease fatalities consist mostly of recognized occupational diseases, that is, diseases known to be primarily or exclusively work-related. This category also includes heart attacks suffered on the job. Occupational diseases are frequently diagnosed several years after the initial or crucial exposure to the toxic substance, and in such cases, it is difficult to determine when the fatal exposure occurred. *The occupational disease category, therefore, should not be interpreted to reflect present worksite hazardous conditions or exposures.*

Each year the WCB accepts some occupational disease fatality claims for compensation. Occupational disease fatality claims that were accepted in a particular year may include fatalities from prior years. In 2005, three of the fatalities accepted by WCB were occupational disease incidents (see Table 4.0).

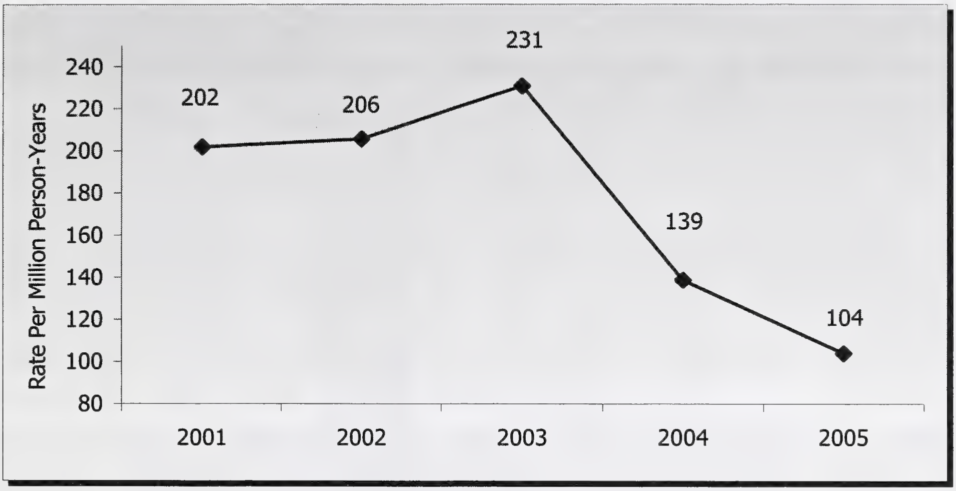
Table 4.0
Types of Occupational Fatalities Accepted by the WCB – Alberta: 2001-2005

Year	Motor Vehicle Incident		Workplace Incident		Occupational Disease		Total
	Number of Fatalities	%	Number of Fatalities	%	Number of Fatalities	%	Number of Fatalities
2001	7	41.2%	10	58.8%	0	0.0%	17
2002	7	38.9%	5	27.8%	6	33.3%	18
2003	10	47.6%	6	28.6%	5	23.8%	21
2004	4	28.6%	7	50.0%	3	21.4%	14
2005	**5**	**41.7%**	**4**	**33.3%**	**3**	**25.0%**	**12**
Total	33	40.2%	32	39.0%	14	17.1%	82

Data Source: 2005 WCB Data, Prepared by Data Development and Evaluation
Note: Data presented is based on WCB classification

The fatality rate is calculated by dividing the number of accepted fatalities in the year by the number of person-years in that year. The result is expressed as "per million person-years." The 2005 fatality rate was 104 per million person-years, a decrease of 25.2% from 2004 (see Chart 4.0).

Chart 4.0
Fatality Rate[9] in Upstream Oil and Gas Industries 2001-2005



Data Source: 2005 WCB Data, Prepared by Data Development and Evaluation

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[9] Estimates are based upon information provided by the WCB. Fatalities occurring under Government of Canada jurisdiction are excluded from the calculation of the fatality rates.

Between 2001 and 2005, the WCB accepted 82 fatalities in the Upstream Oil and Gas industries. The Downhole and Other Oilfield Services sub-sector had the most with 27 accepted fatalities, accounting for 32.9% of total fatalities (see Table 4.1).

Table 4.1
Upstream Oil and Gas Occupational Fatalities Accepted by the WCB by Sub-Sector – Alberta: 2001-2005

						Total	
Sub-Sector	**2001**	**2002**	**2003**	**2004**	**2005**	**Number of Fatalities**	**%**
Downhole and Other Oilfield Services	3	9	3	6	**6**	27	32.9%
Petroleum Producers/ Exploration	3	3	6	2	**1**	15	18.3%
Drilling of Oil and Gas Wells	5	2	6	2	**1**	16	19.5%
Well Servicing with Service Rigs	4	2	2	3	**2**	13	15.9%
Oilfield Trucking Service Rigs	1	1	4	1	**2**	9	11.0%
Tar Sands	0	1	0	0	**0**	1	1.2%
Oilfield Maintenance and Construction	1	0	0	0	**0**	1	1.2%
Upstream Oil and Gas Industries	**17**	**18**	**21**	**14**	**12**	**82**	**100.0%**

Data Source: 2005 WCB Data, Prepared by Data Development and Evaluation

CERTIFICATE OF RECOGNITION EMPLOYERS

A Certificate of Recognition (COR) is given to employers who develop health and safety programs that meet established standards. Certificates are issued by Certifying Partners and are co-signed by AHRE[10].

In 2005, 6.4% of Upstream Oil and Gas industries' employers were COR holders. These employers represented more than half of the total person-years in the Upstream Oil and Gas industries. The Drilling of Oil and Gas Wells sub-sector had the highest proportion of person-years certified. Twenty-six per cent of Well Servicing with Service Rigs employers had valid CORs in 2005, which accounted for 89.4% of all person-years certified in this sub-sector (see Table 5.0).

Table 5.0
Employers With Valid COR — Alberta: 2005

Sub-Sector	Number of Certified Employers	Total Number of Employers	% of Total Employers Certified	% of Total Person-Years Certified
Upstream Oil and Gas Industries	**889**	**13,787**	**6.4%**	**53.0%**
Downhole and Other Oilfield Services	468	6,527	7.2%	71.9%
Drilling of Oil and Gas Wells	29	149	19.5%	89.1%
Oilfield Maintenance and Construction	143	1,106	12.9%	63.0%
Oilfield Trucking Service Rigs	126	1,054	12.0%	60.6%
Petroleum Producers/Exploration	77	4,690	1.6%	47.7%
Tar Sands	0	81	0.0%	0.0%
Well Servicing with Service Rigs	46	180	25.6%	89.4%

Data Source: 2005 WCB Data, Prepared by Data Development and Evaluation

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[10] For more information on the COR program visit http://www.hre.gov.ab.ca/cps/rde/xchg/hre/hs.xsl/277.html

Between 2004 and 2005, the lost-time claim rate for 2005 COR holders in Upstream Oil and Gas increased from 1.5 in 2004 to 1.6 in 2005, while the rate for non-COR holders remained the same at 0.9. For the province, the lost-time claim rate for COR holders remained the same at 2.4 and non-COR holders experienced a decrease from 2.6 to 2.4 in their lost-time claim rates (see Table 5.1).

Table 5.1
Lost-Time Claim Rate for 2005 Upstream Oil and Gas COR Holders — Alberta: 2004 and 2005

Employer	Year	Upstream Oil and Gas Industries				Province			
		LTCs	Person-Years	LTC Rate	Change in LTC Rate	LTCs	Person-Years	LTC Rate	Change in LTC Rate
COR	2004	893	59,671	1.5	5.3%	10,563	431,347	2.4	-3.0%
	2005	1,040	66,027	1.6		11,093	467,041	2.4	
Non-COR	2004	383	41,256	0.9	-2.9%	23,869	921,867	2.6	-6.2%
	2005	441	48,901	0.9		24,367	1,003,280	2.4	

Data Source: 2005 WCB Data, Prepared by Data Development and Evaluation

APPENDIX A: TERMS, DEFINITIONS AND FORMULAS

Lost-Time Claim

A lost-time claim (LTC) is a claim for an occupational injury or disease that causes the worker to have time away from work, beyond the day of injury. Included are claims receiving reimbursement of full or partial lost wages due to occupational illness or injury, or payment for permanent loss of function.

Person-Years

Person-years are estimates calculated from wage and payroll data provided by account holders to the WCB. Alberta Human Resources and Employment uses data to estimate an average industry wage, and uses the average industry wage and employer payroll data to estimate person-years for each employer and each industry. One person-year is equivalent to one full-time worker working for one year, and can be assumed to equal 2,000 hours worked.

Lost-Time Claim Rate

The lost-time claim (LTC) rate is calculated by dividing the number of lost-time claims by the person-year estimate, and multiplying the result by 100. The LTC rate represents the probability or risk of an injury or disease to a worker during a period of one-year work, that will result in time lost from work. Comparisons of LTC rates between industries, or between years, can be used to indicate increases, decreases, or differences in this risk.

$$\text{LTC Rate} = \frac{\text{Number of LTCs} \times 100}{\text{Person-Years}}$$

Duration (Days Lost)

The duration of disability is the number of days following the injury or disease for which the worker was disabled and unable to perform normal work duties. This information is obtained for this report from data on compensation days paid on each claim from the WCB. Alberta Human Resources and Employment obtains these data on March 31 of the year following the claim year, and does not update the information, even though many injured workers continue to be disabled beyond this date. As a result, the duration information reported here underestimates the true impact of lost-time injury and disease.

Duration Rate

The duration rate is calculated by dividing the number of workdays lost (disability days) by the person-year estimate, and multiplying by 100. The result is expressed as days lost per 100 person-years, and indicates, in part, the economic impact of occupational injury and disease. Duration rates are not recommended as reliable indicators of full economic cost. In addition, readers are warned that duration rates are highly unstable when based on only a few lost-time claims; it is recommended that the duration rate not be calculated based upon fewer than 30 lost-time claims.

$$\text{Duration Rate} = \frac{\text{Disability Days x 100}}{\text{Person-Years}}$$

Cost of Claims

Compensation cost of a claim is the reimbursement of full or partial lost wages that a worker received from the WCB due to occupational illness or injury.

WCB Accepted Fatality

An occupational fatality is the death of a worker which resulted from a work-related incident or exposure and which has been accepted by the WCB for compensation. A fatality is counted in the year it is accepted.

Fatality Rate

The fatality rate is calculated by dividing the number of accepted fatalities by the person-years estimate and multiplying the result by one million. The result is expressed as fatalities per million person-years. Fatalities that are found under the jurisdiction of the Government of Canada are excluded before the calculation of the fatality rate.

$$\text{Fatality Rate} = \frac{\text{Number of Fatalities x 1,000,000}}{\text{Person-Years}}$$

Number of Times Higher/Lower than the Provincial Average

The number of times higher/lower than the provincial average is used to compare the performance of the industries with the province regarding specific injury or disease. A number less than one indicates that the injury of the industries is lower than the provincial average; if equal to one it indicates the injury of the industries is the same as the provincial average and a number greater than one indicates that the injury of the industries is higher than the provincial average.

$$\frac{\text{Per cent of Total Claims for the Industries} \quad \text{x} \quad \text{Industries' LTC Rate}}{\text{Per cent of Total Claims for the Province} \quad \text{x} \quad \text{Provincial LTC Rate}}$$

Where:

Per cent of Total Claims for the Industries =

$$\frac{\text{Number of LTCs for the Industries (e.g. back injury)} \quad \text{x} \quad 100}{\text{Total LTCs for the Industries}}$$

Per cent of Total Claims for the Province =

$$\frac{\text{Number of LTCs for the Province (e.g. back injury)} \quad \text{x} \quad 100}{\text{Total LTCs for the Province}}$$

NEC	Means ‘Not Elsewhere Classified’.
UNS	Means ‘Unspecified’.

APPENDIX B: UPSTREAM OIL AND GAS WCB INDUSTRY CODES[11]

1. Petroleum Producers/Exploration

06300 – Oil and Gas Exploration and Development – Upstream Operations
09200 – Seismic Geophysical and Mineral Exploration

2. Oilfield Maintenance and Construction

06304 – Oilfield Construction and/or Maintenance (Upstream of Processing Plants)

3. Well Servicing with Service Rigs

09903 – Well Servicing with Service Rigs including Power Swivels

4. Drilling of Oil and Gas Wells

09600 – Drilling of Oil and Gas Wells

5. Downhole and Other Oilfield Services

06305 – Field Production Operators
06306 – Vacuum Removal of Waste – Industrial, Commercial and Oilfield
09201 – Shot Hole Drilling
09900 – Mud Logging
09902 – Pressure Cleaning Services
09904 – Rathole Drilling and Service Rig Anchoring
09911 – Oilfield Downhole Services
09915 – Well Casing Services
09921 – Servicing Christmas Trees on Oil Wells by Means of a Tree Saver
09927 – Liquid Waste Treatment and Disposal

6. Tar Sands

06600 – Mining and Processing of Bituminous Sand for Oil Extraction
06601 – Research and Development, Oilsands and Heavy Oil Recovery

7. Oilfield Trucking Services

50720 – Oilfield Trucking Services

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[11] Codes are the Workers' Compensation Board – Alberta 2005 industry codes.

CONTACT INFORMATION

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Alberta Human Resources and Employment website:

http://www.hre.gov.ab.ca/cps/rde/xchg/hre/hs.xsl/563.html

Work Safe Alberta website:

http://www3.gov.ab.ca/hre/whs/worksafely/index.asp

Workplace Health and Safety Contact Centre:

Telephone: 780-415-8690, toll free by calling 1-866-415-8690

http://www.hre.gov.ab.ca/cps/rde/xchg/hre/hs.xsl/2874.html

Certificate of Recognition (COR) Program:

http://www.hre.gov.ab.ca/cps/rde/xchg/hre/hs.xsl/277.html

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